

**Notice of Allowability**

Application No.

10/730,216

Examiner

Jeffrey Sharp

Applicant(s)

SOMMER ET AL.

Art Unit

3677

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Interview 6/15/06 and RCE filed 6/6/06.
2. ☒ The allowed claim(s) is/are 1-15 and 19.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a confirmation email from Chris Guinn on 24 July 2006.

The application has been amended as follows:

1. (Currently Amended) A press fit fastener, comprising:
  - a shank having an axis, a first end and a second end;
  - a head being located at the first end of said shank;
  - a press fit portion being located at said shank, said press fit portion having an outer diameter and including a multiple helical profile, said multiple helical profile having fully formed multiple threads, each thread having at least one full thread revolution about the axis of said shank, said helical profile having a beginning portion and an inclination portion having an increasing outer diameter, the outer diameter of said inclination portion being designed to increase in a direction towards said head to reach a maximum outer diameter, the maximum outer diameter of said inclination portion being spaced apart from said head;
  - a cylindrical centering section having an outer diameter, said cylindrical centering section being located next to said beginning portion of said helical profile, the outer diameter of said

Art Unit: 3677

cylindrical centering section being smaller than the minimum outer diameter of said helical profile in the beginning portion; and

a conical portion having an outer diameter, said conical portion being located next to said cylindrical centering portion, said conical portion being designed and arranged to taper in a direction towards said second end such that the diameter of said conical portion increases towards said cylindrical centering section.

2. (Original) The fastener of claim 1, wherein said press fit portion further includes a declination portion in which the outer diameter decreases in a direction towards said head.
3. (Previously Presented) The fastener of claim 2, wherein said press fit portion is barrel-shaped.
4. (Original) The fastener of claim 1, wherein said press fit portion further includes a cylindrical adding portion, said cylindrical adding portion having the maximum outer diameter and being located next to said inclination portion in a direction towards said head.
5. (Original) The fastener of claim 2, wherein said press fit portion further includes a cylindrical adding portion, said cylindrical adding portion having the maximum outer diameter and being located next to said inclination portion in a direction towards said head.

Art Unit: 3677

6. (Original) The fastener of claim 4, wherein said cylindrical adding portion is located between said inclination portion and said declination portion.
7. (Original) The fastener of claim 5, wherein said cylindrical adding portion is located between said inclination portion and said declination portion.
8. (Previously Presented) The fastener of claim 1, wherein said helical profile includes at least six threads.
9. (Original) The fastener of claim 1, wherein said helical profile has an angle of inclination of between approximately  $5^{\circ}$  and  $30^{\circ}$ .
10. (Previously Presented) The fastener of claim 1, further comprising a threaded portion including a thread having a pitch diameter, said threaded portion being located at the second end of said shank in a direction facing away from said head, said helical profile having a core diameter which is greater than the pitch diameter of said thread.
11. (Previously Presented) The fastener of claim 1, further comprising a threaded portion including a thread having a pitch diameter, said threaded portion being located at the second end of said shank in a direction facing away from said head, said helical profile having a core diameter which approximately equals the pitch diameter of said thread.

Art Unit: 3677

12. (Currently Amended) The fastener of claim 1, further comprising:

a threaded portion including a thread having an outer diameter, said threaded portion being located at the second end of said shank in a direction facing away from said head wherein the outer diameter of said cylindrical centering section is greater than the outer diameter of said thread.

13. (Currently Amended) The fastener of claim 12, wherein said cylindrical centering section has an axial length which is approximately between 10% and 50% of the maximum outer diameter of said press fit portion.

14. (Currently Amended) The fastener of claim 12, wherein said cylindrical centering section has an axial length which is approximately 25% of the maximum outer diameter of said press fit portion.

15. (Previously Presented) The fastener of claim 1, wherein the press fit fastener is designed as a wheel stud.

16. – 18. (Canceled)

19. (Previously Presented) The fastener of claim 1, wherein the inclination portion forms at least approximately 10% of the axial length of the multiple helical profile.

The following is an examiner's statement of reasons for allowance:

The Damm et al. '386 reference shows what could broadly be construed as an unthreaded cylindrical centering section between the barrel-shaped multiple helical profile and the thread.

Art Unit: 3677

The cylindrical centering section taught by Damm et al. does have an outer diameter which is less than the outer diameter of any portion of the multiple helical profile used for press-fitting. However, the Examiner takes the position that the prior art of record would not reasonably suggest placing a conical section on Damm et al. at a location between the centering section and the threaded portion of the shank, said conical section tapering radially outwardly as it extends towards the centering section, without using impermissible hindsight reasoning. It appears that this is the main and novel improvement of the present invention over the prior art.

Furthermore, the other close prior art reference of record, Waltermire '495, shows what could broadly be construed as a centering section, and also a conical section near the threaded shank portion. However, what could broadly be construed as a centering section taught by Waltermire, is not "cylindrical" as it has no axial length. Moreover, as disclosed by Applicant in the specification, on page 13, lines 13-14, no portion of the conical portion taught by Waltermire could be broadly construed as a centering section. Accordingly, the close prior art of Waltermire fails to read on the above-amended claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

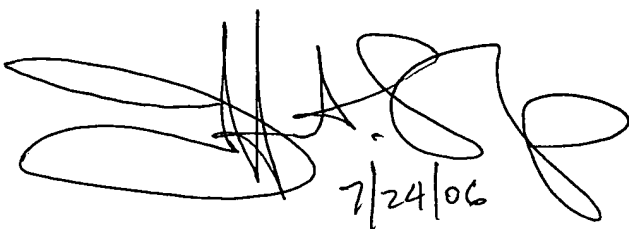
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sharp whose telephone number is (571) 272-7074. The examiner can normally be reached on 5:30 am - 4:00 pm Mon-Thurs..

Art Unit: 3677


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAS



Handwritten signature and date 7/24/06



ROBERT J. SANDY  
PRIMARY EXAMINER